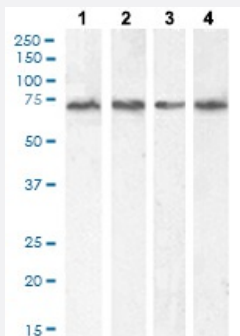


# PCK2 polyclonal antibody

Catalog # PAB6875

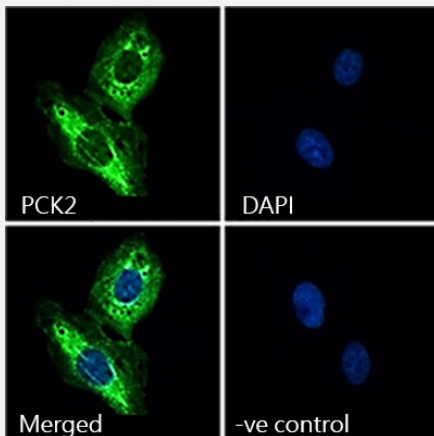
Size 100 ug

## Applications



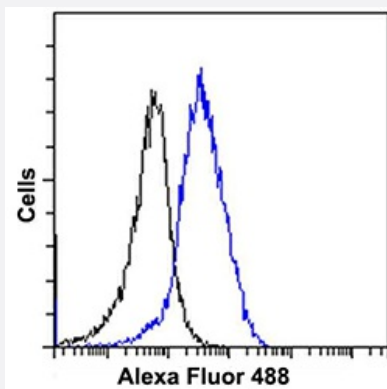
### Western Blot (Cell lysate)

PCK2 polyclonal antibody (Cat # PAB6875) (2 ug/mL) staining of A431 (1), HEK293 (2) (1 ug/mL) HepG2 (3) and (2 ug/mL) NIH3T3 (4) cell lysate (35 ug protein in RIPA buffer). Detected by chemiluminescence.



### Immunofluorescence

PCK2 polyclonal antibody (Cat # PAB6875) Immunofluorescence analysis of paraformaldehyde fixed U2OS cells, permeabilized with 0.15% Triton. Primary incubation 1hr (10 ug/mL) followed by Alexa Fluor 488 secondary antibody (2 ug/mL), showing cytoplasmic staining. The nuclear stain is DAPI (blue). Negative control: Unimmunized goat IgG (10 ug/mL) followed by Alexa Fluor 488 secondary antibody (2 ug/mL).



### Flow Cytometry

PCK2 polyclonal antibody (Cat # PAB6875) Flow cytometric analysis of paraformaldehyde fixed MCF7 cells (blue line), permeabilized with 0.5% Triton. Primary incubation 1hr (10 ug/mL) followed by Alexa Fluor 488 secondary antibody (1 ug/mL). IgG control: Unimmunized goat IgG (black line) followed by Alexa Fluor 488 secondary antibody.

## Specification

|                                |                                                                                                                                                                                |
|--------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product Description</b>     | Goat polyclonal antibody raised against synthetic peptide of PCK2.                                                                                                             |
| <b>Immunogen</b>               | A synthetic peptide corresponding to human PCK2.                                                                                                                               |
| <b>Sequence</b>                | KPWKPGDKEPCAH                                                                                                                                                                  |
| <b>Host</b>                    | Goat                                                                                                                                                                           |
| <b>Theoretical MW (kDa)</b>    | 70.7                                                                                                                                                                           |
| <b>Reactivity</b>              | Human                                                                                                                                                                          |
| <b>Specificity</b>             | This antibody is expected to recognize isoform 1 (NP_004554) only, no cross-reactivity with PCK1.                                                                              |
| <b>Form</b>                    | Liquid                                                                                                                                                                         |
| <b>Purification</b>            | Antigen affinity purification                                                                                                                                                  |
| <b>Concentration</b>           | 0.5 mg/mL                                                                                                                                                                      |
| <b>Quality Control Testing</b> | Antibody Reactive Against Synthetic Peptide.                                                                                                                                   |
| <b>Recommend Usage</b>         | ELISA (1:4000)<br>Flow Cytometry (10 ug/mL)<br>Immunofluorescence (10 ug/mL)<br>Western Blot (1-3 ug/mL)<br>The optimal working dilution should be determined by the end user. |
| <b>Storage Buffer</b>          | In Tris saline, pH 7.3 (0.5% BSA, 0.02% sodium azide)                                                                                                                          |
| <b>Storage Instruction</b>     | Store at -20°C.<br>Aliquot to avoid repeated freezing and thawing.                                                                                                             |
| <b>Note</b>                    | This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.                                                         |

## Applications

- Western Blot (Cell lysate)

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- Enzyme-linked Immunoabsorbent Assay

- Flow Cytometry

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## Gene Info — PCK2

Entrez GeneID [5106](#)

Protein Accession# [NP\\_004554.2](#)

Gene Name PCK2

Gene Alias PEPCK, PEPCK-M, PEPCK2

Gene Description phosphoenolpyruvate carboxykinase 2 (mitochondrial)

Omim ID [261650](#)

Gene Ontology [Hyperlink](#)

**Gene Summary** This gene encodes a member of the phosphoenolpyruvate carboxykinase (GTP) family. The protein is a mitochondrial enzyme that catalyzes the conversion of oxaloacetate to phosphoenolpyruvate in the presence of GTP. A cytosolic form encoded by a different gene has also been characterized and is the key enzyme of gluconeogenesis in the liver. The encoded protein may serve a similar function, although it is constitutively expressed and not modulated by hormones such as glucagon and insulin that regulate the cytosolic form. Alternatively spliced transcript variants have been described. [provided by RefSeq]

**Other Designations** OTTHUMP00000164700|PEP carboxykinase|mitochondrial phosphoenolpyruvate carboxykinase 2|phosphoenolpyruvate carboxylase|phosphopyruvate carboxylase

## Publication Reference

- [Expression of phosphoenolpyruvate carboxykinase gene in human adipose tissue: induction by rosiglitazone and genetic analyses of the adipocyte-specific region of the promoter in type 2 diabetes.](#)

Duplus E, Benelli C, Reis AF, Fouque F, Velho G, Forest C.

Biochimie 2003 Dec; 85(12):1257.

## Pathway

- [Adipocytokine signaling pathway](#)
- [Citrate cycle \(TCA cycle\)](#)
- [Glycolysis / Gluconeogenesis](#)
- [Insulin signaling pathway](#)
- [Metabolic pathways](#)
- [PPAR signaling pathway](#)
- [Pyruvate metabolism](#)

## Disease

- [Diabetes Mellitus](#)